



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10**

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OFFICE OF
REGIONAL
COUNSEL

August 3, 2012

Confidential Settlement Communication – Subject to Fed R. Evid. 408

Joseph A. Brogan
Foster Pepper PLLC
1111 Third Avenue, Suite 3400
Seattle, WA 98101-3299

Re: *United States v. Port of Tacoma, et al.*, No. 11-cv-05253 (W.D. Wa.)
Basis of Design for Compensatory and Additional Mitigation

Dear Mr. Brogan,

As we discussed, this letter outlines important elements of a "Basis of Design" report and supporting documentation for the Port of Tacoma's proposed mitigation at the Upper Clear Creek Mitigation Site. The Basis of Design document is the mechanism for the Port to present its overall vision for the proposed mitigation projects, along with plans for executing the work and documenting progress of site conditions towards overall project goals. As is the standard practice for design and review processes that accompany mitigation projects in waters of the U.S., including wetlands, the Basis of Design document should be supported by hydrologic modeling, earthwork calculations, planting plans and take-offs, itemized costs, construction sequencing, construction schedule(s), and a final monitoring and adaptive management plan. These elements are described in more detail below. For the sake of consistency in our discussions, we also offer definitions of key terms in the attached Table 1.

In general, overall project goals should be derived from agreed-upon Project Targets, which must be fully supported by hydrologic modeling in the final design. Please also note that the specific projects comprising the Port's proposed compensatory and additional mitigation should be identified as such and addressed separately in the Basis of Design. We have tentatively scheduled a meeting on August 15, 2012, at which we can discuss Project Targets and our recommended elements for the Basis of Design. We request that the Port complete the Basis of Design no later than October 1, 2012.

Recommended Key Elements of the Basis of Design Report:

A. Overall Goals - A section in the introductory portion of the Basis of Design that articulates overall project goals and overriding design principles.

B. Itemized Project Targets and Project Standards (Table 1) - Stratified by hydrologic, biogeochemical, plant community, and faunal support/habitat functions.

C. Hydrologic Modeling - Hydrologic modeling of present and future conditions in the Clear Creek ecosystem is a critical element of the design. This includes detailed analyses of current stream hydrology and how the proposed modifications at the Clear Creek mitigation site would affect water levels, water residence times, patterns of surface and shallow subsurface water flow and circulation, etc. This will provide an overall understanding of how water enters the site, where water goes, when, and for how long.

D. Earthwork & Grading - Hydrologic modeling plays directly into mass and fine earthwork/grading. Please provide plans that show how the Port will manipulate site elevations, plan forms, and channel/floodplain systems. We are focused on the interactions and connections between the channel and floodplain systems and how these interactions and connections will work to link hydrologic, biogeochemical, plant community, and faunal support/habitat functions in the Clear Creek ecosystem. These linkages are central to maximizing the potential of the Clear Creek site to respond to restoration measures.

E. Microtopographic Complexity - Please provide details on the types and density of microtopographic features the Port plans for the design (e.g. large wood/floodplain mounds and depressions, etc.). We see these features as being critical in setting up several processes that occur in riverine ecosystems such as energy dissipation, direction of the flow and circulation of water, manipulation of short and long term storage of water on the floodplain, manipulation of water balances to provide opportunities for development of diverse plant communities, manipulation of surface and subsurface features that add faunal habitat complexity.

F. Plant Communities - Please provide:

1. Details on what types of plant communities are planned and how they are distributed over the mitigation site;
2. Reference (bio-benchmark) information (Table 1) to indicate why plant choices are appropriate and how likely they are to be sustainable;

3. Information on soil condition, given the high proportion of invasive species that are currently on the site. Identify target soil quality, particularly with reference to organic matter, based on bio-benchmark/target reference information, and identify construction practices that will avoid soil compaction in the project area; and
4. Identification of invasive plant and faunal species present, the likelihood of recurrence, plans for managing these species, and how such plans fit in with Project Targets and overall restoration goals.

G. Monitoring & Adaptive Management - Please provide details on how the site will be monitored, who will conduct the monitoring, and what types of "first line" contingency measures/adaptive management strategies are in place to ensure that monitoring measurements of Project Standards show progress towards Project Targets on time. To begin, we recommend establishing "baseline" (time zero) conditions immediately after construction is complete and monitoring for a ten (10) year interval in years 1, 2, 3, 5, 7, and 10.

H. Schedule - Please provide a detailed schedule, including design and construction sequencing that identifies who is doing what and when (*e.g.* hydrologic monitoring, civil engineering, earthwork, planting, *etc.*).

I. Itemized Costs - Please provide itemized cost estimates for each element of the project.

J. Compliance with Several Levels of Jurisdiction - Please provide a plan that shows how the Port will coordinate with the several levels of jurisdiction that regulate activities in waters/wetlands and their buffers, including:

1. NOAA/NMFS – requirements for management of listed species and their habitats;
2. Washington State – Department of Fish and Wildlife, Hydraulic Project Approval, and Department of Ecology, Clean Water Section 401 (Water Quality Certification), and sediment and erosion control requirements;
3. Section 106 – National Historic Preservation Act requirements;
4. County/City requirements for work in critical areas and buffers, grading, *etc.*
5. Others as pertinent.

In addition to the Basis of Design, please note that certain related items remain outstanding. Your letter dated May 16, 2012 stated the Port's agreement to revise the UCCMS Wetland Delineation Report and wetlands categorization as requested by the United States in our April 20, 2012 letter. We requested that the Port:

1. Revise the map and report to show Clear Creek (cartographically distinct) as a Type 3 water of the U.S., and provide the area of this mapped unit and wetlands in a revised table;

2. Show culvert locations and flow vectors into and out of the culverts and the wetlands in general; and
3. Change the categorization/ranking of the wetlands on the site to Category 1 and revise supporting data sheets accordingly, or provide additional information to substantiate the original scoring.

The Port further agreed to revise the UCCMS Conceptual Mitigation Plan to include two additional actions requested by the United States in our April 20 letter, specifically removal of two identified culverts and grading the linear side-cast mound that parallels the Clear Creek channel in the northwest corner of the UCCMS. Please ensure that these necessary revisions are completed. We can also discuss whether any of these revisions may be addressed directly through the Basis of Design at our upcoming meeting.

We look forward to meeting with the Port to discuss the Basis of Design document and to move forward on resolving this case. Please contact me at 206-553-6052 if you have any questions or concerns in the meantime. Thank you.

Sincerely,

/s/

Kimberly A. Owens
Assistant Regional Counsel

Attachment

CC: Michael Szerlog, EPA
Mary Anne Thiesing, EPA
Austin Saylor, DOJ
Kent Hanson, DOJ

Attachment

Table 1. Definitions of Key Terms

Reference Domain - All waters/wetlands within a defined geographic region that belong to a single hydrogeomorphic subclass.

Reference Wetlands - Waters/wetland sites within the reference domain that encompass the known variation of the subclass. Reference waters/wetlands are used to establish the ranges of variation.

Reference Standard Sites - Those sites within a reference waters/wetland data set from which reference standards are developed. Among all reference waters/wetlands, Reference Standard Sites are judged by an interdisciplinary team to have the highest level of functioning.

Reference Standards - Conditions exhibited by a group of reference waters/wetlands that correspond to the highest level of functioning (highest sustainable capacity) across the suite of functions of the subclass. By definition, reference standard functions receive an index score of “1.0”.

Site Potential - The highest level of functioning possible given local constraints of disturbance history, land use, or other factors. Site potential may be equal to or less than levels of functioning established by reference standards.

Project Target - The level of functioning identified or negotiated for a restoration or creation project. This target must be based on reference standards and/or site potential and be consistent with restoration or creation goals. Project targets are used to evaluate whether a project is developing toward reference standards and/or site potential.

Project Standards - Performance criteria and/or specifications used to guide the restoration or creation activities towards the project target. Project standards should include and specify reasonable contingency measures if the project target is not being achieved.
